In the United States Court of Federal Claims

No. 97-251C
(Filed June 20, 2003)

CROSS PETROLEUM, INC.,	Contracts; damages; reasonableness; wrongful
Plaintiff,	termination; environmental
v.	cleanup; counterclaim; 42 U.S.C. §§ 9601-9675 (2002); 48 C.F.R. (FAR) § 6.302-2
THE UNITED STATES,	(2002); 40 C.F.R. § 300.1 (2002); 40 C.F.R. § 300.3(b)
Defendant.	(2002).

Walter P. McNeill, Redding, CA, for plaintiff.

Michael F. Kiely, Washington, DC, with whom was Assistant Attorney General Robert D. McCallum, Jr., for defendant. Rose Miksovsky and James Andrews, Department of Agriculture, San Francisco, CA, of counsel.

OPINION

MILLER, Judge.

This case comes for decision after trial on the reasonableness of the Government's remediation of a national park contaminated by a gasoline spill. The wrongfully terminated contractor contends that the Government's cleanup efforts exceeded what the contractor would have done if it had been afforded the opportunity to clear the site of contaminants. Defendant claims that its remediation course, still ongoing at the time of trial, was commensurate with the industry standard.

In an earlier trial, the court found that the Government had wrongfully terminated plaintiff's cleanup efforts which were collateral to the performance of its fuel-delivery contract. The parties' commitment to settlement halted the trial before defendant put on its case to justify the damages claimed. Settlement collapsed, trial resumed, and the proofs underscored the following anomaly: Plaintiff, as the wrongfully terminated contractor, is in

precisely the same position as it would have been had the termination been upheld. In other words, regardless of the circumstances of its termination, plaintiff is still the party responsible for the spill, and the only question is whether the Government's costs in assuming plaintiff's site cleanup are reasonable.

BACKGROUND

A gasoline spill that occurred over ten years ago at the United States Forest Service (the "Forest Service") facility in the Klamath National Forest, California, known as the Oak Knoll Work Center ("Oak Knoll"), was the genesis of this litigation.

In quite possibly the most disastrous first—and, presumably, last—day on the job, an employee from Cross Petroleum, Inc. ("plaintiff"), on April 30, 1993, pumped 2,000 gallons of unleaded gasoline into a monitoring well that he mistook for an underground storage tank. The gasoline seeped through the monitoring well, which was not designed to hold liquid, and contaminated the subsurface.

Plaintiff accepted responsibility for the spill as a matter of fact, but the parties disputed responsibility for the remediation. In Cross Petroleum, Inc. v. United States, 51 Fed. Cl. 549 (2002), the court found that the indemnity provision of plaintiff's contract with the Forest Service for the delivery of diesel fuel also applied to the delivery of unleaded gasoline. The case proceeded to trial in August 2002. When settlement was not consummated, the court issued an opinion that 1) concluded that the Forest Service wrongfully terminated plaintiff's remediation efforts and 2) established the burdens of proof that would govern the subsequent damages proceeding. See Cross Petroleum, Inc. v. United States, 54 Fed. Cl. 317 (2002).

Under traditional termination principles, the Forest Service, owing to its improper termination of plaintiff, would bear the cost of remediation. See J.D. Hedin Constr. Co. v. United States, 187 Ct. Cl. 45, 408 F.2d 424, 431 (1969) ("Plaintiff is, of course, entitled to be liberated from the negative consequences of the [improper] default termination . . . ."). However, the traditional paradigm made little sense when applied to the case at bar, as the party responsible for the pollution would be absolved of financing the remediation. After a search for binding precedent addressing the unique situation at hand yielded no case on point, the court, at defendant's behest, consulted the liability rubric in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9601-9675 (2002) ("CERCLA"), which allocates responsibility for the cost of cleanup financed by the Government to the party responsible for the pollution. Under CERCLA if the Government establishes that it expended costs to remedy a release or threatened release of hazardous substances and that defendants are the responsible parties, defendants then have the burden

of proving that the costs incurred were "inconsistent with the national contingency plan," which is designed to ensure cost-effective remediation efforts. See 42 U.S.C. § 9607(a)(1)-(4)(A); 40 C.F.R. § 300.1 (2002); 40 C.F.R. § 300.3(b).

Defendant sought to enforce plaintiff's responsibility relying on Minnesota v. Kalman W. Abrams Metals, Inc., 155 F.3d 1019 (8th Cir. 1998). Defendants in Abrams Metals contested liability for the cost of an environmental cleanup when the state of Minnesota, in violation of CERCLA, failed to afford them an opportunity to comment on or to undertake cleanup activities at their own expense. The Eighth Circuit refused to wipe the slate clean for the cleanup merely because "the environmental constable blundered," but also balked at rewarding the state's "wasteful agency action." 155 F.3d at 1026. The court struck a balance between the two wrongs, holding that the state could not recover costs for aspects of the cleanup that defendants proved that they could have accomplished more cost effectively. Id.

The scenario in Abrams Metals parallels that of the parties at hand, insofar as the responsible parties in both cases "were precluded from meeting their obligations under the contract and object to the costly manner in which that obligation ultimately was discharged by others. The Government entities in both cases persuasively argue that technical defects in the process by which a cleanup is conducted should not absolve a liable party of the entire cost of remediation." Cross, 54 Fed. Cl. at 329.

Persuaded that plaintiff must bear responsibility for the cleanup, the court determined that the following burdens of proof would apply to the damages phase of the proceedings: Defendant would bear the initial burden of justifying its remediation costs, after which the burden would shift to plaintiff to show that "the costs were unreasonable, *i.e.*, that plaintiff could have accomplished the cleanup more cost effectively." Cross, 54 Fed. Cl. at 330, ¶ 3. 1/ However, the court rejected defendant's contention that remediation actions approved by the North Coast Regional Water Quality Control Board (the "Water Board" or the "Board") are presumptively reasonable, as that organization's approval does not signify that the most cost-effective means were used to complete a remediation. Id. at 329-30.

1/ In its order of February 3, 2003, the court described how plaintiff could meet its burden on response: "[P]laintiff can attempt to prove not only 1) that the amounts paid to the Forest Service's remediation contractor are excessive or otherwise unreasonable, but also 2) that the amounts are unreasonable insofar as the clean-up involved any contaminant that was not oil spill." Cross Petroleum, Inc. v. United States, No. 97-251C, at 1 (Fed. Cl. Feb. 3, 2003).

The court announced that it would not apply CERCLA in the case at bar (as the Court of Federal Claims lacks jurisdiction to do so) and advised the parties, that, if they wished to resolve damages in a pending district court case, they could try the issue in their preferred forum. 2/ Cross, 54 Fed. Cl. at 330 n.4. Defendant reiterated its willingness to remain in the Court of Federal Claims, but plaintiff reserved its objection to this forum. See Pl.'s Br. filed Dec. 30, 2002, at 4 n.4. Plaintiff argued that the court should allow it to pursue a case for "contribution" in which plaintiff could seek to shift financial responsibility for the spill to defendant based on the allegedly deficient machinery and personnel employed by the Forest Service. The court denied plaintiff the opportunity to pursue this damages hypothesis or any other form of comparative negligence, concluding that these theories implicated Count II of plaintiff's complaint, which the court had dismissed for lack of subject matter jurisdiction. See Cross Petroleum, Inc. v. United States, No. 97-251C (Fed. Cl. Nov. 5, 1997) (order dismissing claim that allegedly faulty design of underground tank rendered defendant, on basis of comparative negligence, more than 50 percent at fault for consequences of gasoline spill).

FACTS

The court's prior opinion, see Cross, 54 Fed. Cl. 317, details the facts surrounding the discovery of the April 30, 1993 gasoline spill and the parties' initial remediation efforts. That factual recitation is incorporated by reference, and only the salient facts from that opinion are presented below.

1. Oak Knoll

Roger G. J. Rogers, a Civil Engineering Technician assigned to Oak Knoll, provided the court with useful background information regarding the site impacted by the gasoline spill. Serving as both a Contracting Officer's Representative and an on-site coordinator when dealing with the remediation of hazardous materials, Mr. Rogers testified that Oak Knoll serves primarily as a location where Forest Service employees, including fire and law enforcement patrols, receive their daily work assignments. Families of some Forest Service personnel live at Oak Knoll on a permanent basis, with wells serving as their primary source of drinking water. In approximately 1982 the Forest Service abandoned a drinking well that

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2/ Plaintiff is subject to a prosecution in California district court. See United States v. Cross Petroleum, Inc., No. CIV S-99-0664 LKK/GGH (E.D. Cal., filed Apr. 6, 1999). The Government brought the action for breach of contract and trespass and seeks damages in excess of $3 million for costs associated with the April 30, 1993 gasoline spill. The district court stayed that action on May 19, 1999, pending a decision in the instant case.

did not conform with California state regulations governing water systems and installed a replacement well (the "domestic well" or the "DOM"). The court found Mr. Rogers to be straightforward, albeit too eager to justify the Forest Service's decade-long effort to remediate the spill.

Several defense witnesses testified to the complexity of the geography of Oak Knoll's subsurface. Michael S. Bonkowski, a Certified Engineering Geologist and the owner of Bonkowski & Associates, Inc. ("B&A"), testified that the monitoring well subjected to the gasoline spill was "in the middle of a landslide." Transcript of Proceedings, Cross Petroleum, Inc. v. United States, No. 97-251C, at 264 (Fed. Cl. Feb. 24-28, 2003) ("Tr."). Mr. Bonkowski explained that the well was located in rocks and debris that collapsed several thousand years ago, leaving a "disturbed slope." Id. at 264. He characterized the Oak Knoll subsurface as a "complicated site," because the collapsed rocks "all had different water-bearing qualities." Id. at 272. Two underground sources of water in the area were subjected to the spill: a perched aquifer and a deep water, or fractured bedrock, aquifer. Although witnesses agreed that the Oak Knoll subsurface contained these two aquifers, their opinions differed on whether water flowed between the two water sources or if they were separated by layers of rock.

2. Early remediation efforts 3/

Once Forest Service personnel discovered the gasoline spill on May 3, 1993, the domestic well was turned off lest contaminated water be pulled into the Oak Knoll plumbing system. Plaintiff, through its pollution policy with Federated Mutual Insurance Company ("Federated"), initially arranged for Aegis Environmental ("Aegis") to conduct certain aspects of the emergency remediation. Aegis subcontracted with Inter-Mountain Electric to excavate the contaminated monitoring well and the storage tank of which it was a part. Inter-Mountain Electric performed the excavation on May 5, 1993, and stockpiled the soil from the excavation in an area near Oak Knoll's sewer lagoon.

The Forest Service wanted plaintiff to supply potable water to the area until the DOM could be turned on and requested installation of a ten-foot bentonite plug in the excavated hole before it was backfilled in order to prevent future contamination of groundwater. Federated and plaintiff refused to supply potable water after June 4, 1993, and balked at the

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3/ The October 31, 2002 opinion, see Cross, 54 Fed. Cl. 317, set forth the history of remediation efforts up to plaintiff's firing by the Forest Service in late 1993. However, because defendant's experts had not testified at that trial, the court's discussion was general. To the extent that this opinion is inconsistent, it supersedes the October 31, 2002 opinion.

request for the bentonite plug. Aegis went out of business shortly after its retention by plaintiff, so plaintiff hired B&A, an environmental engineering and consulting company. According to Mr. Bonkowski, Federated contacted him in June 1993 to broker an agreement between plaintiff and the Forest Service over how to backfill the tank cavity. After meeting with Dennis L. Cross, plaintiff's Vice President, on or about July 3, 1993, Mr. Bonkowski was invited by plaintiff and Federated to take over the remediation. On July 8, 1993, Gail E. Clark, Claims Supervisor for Federated, wrote to the Forest Service, indicating that the remediation had been transferred from Aegis to B&A.

B&A drafted a remedial workplan, which Mr. Bonkowski testified was reviewed and approved by Federated and plaintiff, 4/ and submitted it to the Water Board for approval on August 3, 1993. The plan outlined several remediation tasks, including sampling the soil from the tank cavity for contamination, backfilling the tank cavity, installing four groundwater monitoring wells to protect the domestic well, and monitoring the groundwater for one year. Mr. Bonkowski agreed with plaintiff that installing the bentonite plug was not necessary and advised plaintiff against returning the excavated soil to the tank cavity for fear of placing contaminated dirt back into the ground.

After submitting the remedial workplan to the Water Board, B&A prepared a "planning document" for Federated, which outlined the cost of remediating the site. Tr. at 260. B&A submitted an estimate of $383,406.54 to Federated on September 8, 1993—five days after receiving the Water Board's approval of its workplan. Federated responded by terminating B&A by letter of September 20, 1993. After B&A's termination Mr. Bonkowski met with Mr. Cross and tried to explain the tasks encompassed by the estimate. An unpersuaded Mr. Cross, according to Mr. Bonkowski, labeled the estimate "outlandish," id. at 261, and refused to revoke the termination, having hired Hydro Environmental Technologies, Inc. ("HETI"), as plaintiff's new environmental consultant on September 20, 1993.

3. Role of the Water Board

Although the Siskiyou County Health Department initially supervised the remediation, the Water Board took over as lead agency on the project when it appeared that contaminants impacted the water sources at Oak Knoll. According to Thomas B. Dunbar, Senior Water

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4/ In the liability trial, the court heard testimony from Mr. Cross, in which he stated that he was unaware that B&A had submitted a workplan to the Water Board and that neither he nor Federated had reviewed the plan. See Cross, 54 Fed. Cl. at 321.

Resource Control Engineer for the Water Board, the function of the Board is "to protect beneficial uses of water quality, both surface water and groundwater." Tr. at 358.

When it appears that a discharge of pollutants could negatively impact water quality, the Water Board notifies the responsible party of its obligation to remediate the impacted area. As part of its oversight function, the Board requests progress reports on site remediation, as well as proposed workplans for future action. The Water Board reviews remediation techniques proposed by the responsible party and either concurs or refuses to concur with a suggested remediation method. Mr. Dunbar testified that a non-concurrence was "more of a recommendation," which usually led to negotiations between the Water Board and the responsible party regarding future cleanup techniques. Tr. at 366. According to Jay F. Mika, the Facilities Engineer and Contracting Officer's Representative for the Oak Knoll remediation until 1995, and who testified by deposition in the liability trial, the Water Board had "ultimate control" over any remediation proposal. See Dep. of Jay F. Mika, Nov. 3, 1998, at 48.

The Water Board considered the Forest Service and plaintiff to be the parties responsible for the contamination of Oak Knoll. B&A sent several workplans to the Water Board for approval subsequent to the gasoline discharge, and the Water Board made no specific non-concurrences regarding the proposed remediation techniques until the 1999 dispute over terminating the pump-and-treat system (discussed *infra* at 12-13). However, the friction between the Water Board and the Forest Service/B&A was apparent from the percipient testimony. Mr. Bonkowski testified that the Water Board "was difficult to deal with," Tr. at 349, while Dean L. Prat, an Engineering Geologist with the Water Board, retorted that the Forest Service never made clear its goal for future water uses at Oak Knoll. The differing views of the Water Board and the Forest Service contributed to the prolonged remediation of Oak Knoll.

4. Retention of B&A by the Forest Service

The Forest Service contacted B&A in October 1993 about the latter's taking over the remediation. On October 21, 1993, the Forest Service terminated plaintiff's remediation efforts by a process that the court has determined was wrongful. See Cross, 54 Fed. Cl. at 330, ¶ 1. The Forest Service then contracted with B&A on October 28, 1993, under authority of 48 C.F.R. (FAR) § 6.302-2 (2002), entitled "Unusual and Compelling Urgency," which allowed the Forest Service to engage B&A on a non-competitive basis. Although B&A had provided an estimate of $383,406.54, to Federated on September 8, 2002, its contract with the Forest Service was awarded in the amount of $208,838.90. The significant reduction was due to the fact that the estimate submitted to Federated included several years' worth of remediation tasks, whereas the Forest Service assigned only four discrete tasks to B&A:

backfilling the tank cavity, winterizing the soil stockpiled by Aegis, installing four monitoring wells, and monitoring and preparing reports on the groundwater for one year. Thereafter, the Forest Service approved subsequent funding for additional B&A projects through a series of purchase orders, the propriety of which the parties dispute.

Mr. Bonkowski testified that, having confirmed with the Water Board that its previously submitted workplan still was acceptable, B&A "quickly button[ed] up [the] tank cavity that had been open for five or six months, because [the Forest Service] was concerned about winter rains." Tr. at 263-64. After the backfill was completed on November 5, 1993, B&A installed four monitoring wells, numbered 1 through 4, around the tank cavity in November 1993. The wells were "spaced . . . out[] in anticipation of trying to identify the direction of groundwater flow." Id. at 270. Monitoring wells 1, 2, and 4 were designed to monitor the shallowest groundwater, while monitoring well 3 was placed in the upper zone of the deep aquifer. According to Mr. Rogers, B&A asked for quarterly monitoring of the wells, which was consistent with Water Board standard procedure, but the Forest Service insisted on monthly monitoring to ensure that the flow of the contaminants would not be missed.

B&A covered the excavated soil that Aegis left stockpiled before the end of 1993 and installed monitoring well 3-D between January 19 and February 2, 1994, in the lower portions of the deep aquifer, the same area from which the DOM drew its water. Monitoring wells 5 and 6 followed in December 1994; during the same month, B&A drilled eight soil borings in an area around the tank cavity, samples from which were taken for additional testing.

5. Groundwater testing

B&A, at the direction of the Forest Service, began "almost immediately" taking samples from the monitoring wells. Tr. at 277. B&A subcontracted the testing of the samples to two laboratories, K Prime, Inc., and Sequoia Analytical. Initially, the laboratories, conforming to the Water Board's dictates for sites contaminated by gasoline, tested the samples for seven compounds: total petroleum hydrocarbons in gasoline ("TPHG"), total petroleum hydrocarbons as diesel, ("TPHD"), benzene, toluene, ethyl-benzene, M-&P-xylene, and O-xylene. All of the above signify the presence of gasoline. TPHD, in contrast, also can signify the presence of diesel. Although both gasoline and diesel derive from petroleum, the two fuels have different chemical properties.

The compounds were tested against the California maximum contaminant level, or MCL. Both California state authorities and the federal Environmental Protection Agency annually publish maximum levels of certain contaminants, which are the product of risk and

toxicity studies conducted by these regulators. A contaminant can have both a primary and secondary MCL. A product's primary MCL connotes a health risk and is the enforceable ceiling for human consumption. A secondary MCL is a "nonenforceable but recommended" contaminant level, which is usually associated with a change in taste and/or odor of a product. Tr. at 131. While water with a contaminant in excess of its secondary MCL can be used safely for activities other than human consumption, a secondary MCL reading can signify the possibility of some health risks if the water is consumed.

According to a summary of the testing results submitted to the Water Board, the earliest tests of the monitoring wells at Oak Knoll occurred on either November 18 or 21, 1993, in monitoring wells 1, 2, 3, and 4. Testing in monitoring well 3-D began in June 1994 and in late January 1995 for wells 5 and 6. Mr. Bonkowski characterized the testing results from 1993 to August 1995 as showing "low-level hits of this and that," but nothing that would warrant "jump[ing] right into doing some remediation." Tr. at 282-83. However, results from August 17, 1995, showed detections of all seven compounds in monitoring well 5, with benzene, for example, reading at a level 732 times its California MCL. Mr. Bonkowski blamed the delay in detecting contaminants on a fractured rock groundwater boundary that slowed the contaminated water from reaching monitoring well 5.

B&A performed a pump and a vapor extraction test on August 26, 1995. The next round of testing results for monitoring well 5, taken on September 14, 1995, showed a spike in almost every compound, with the level of benzene rising to 1,030 times its primary MCL. These readings prompted B&A to hold a series of meetings with the Forest Service and the Water Board. During one of the meetings, Roy R. O'Connor, an Engineering Geologist with the Water Board and the primary Water Board employee assigned to the Oak Knoll cleanup from 1993-1999, indicated to Mr. Bonkowski that further remediation efforts were necessary. Mr. Bonkowski testified that the federal and state officials concluded that the site would never be free from contaminants, so the most cost-effective remediation course would be to protect the DOM from further pollution. The threat to Oak Knoll's drinking water thus became the focal point of the Forest Service's and B&A's future remediation efforts.

6. The pump-and-treat system

Following these meetings, B&A drafted a control plan, dated December 22, 1995, which detailed a strategy to prevent contaminated fluid from reaching the DOM. Plaintiff's consultant Markus B. Niebanck, formally of HETI—where he was in charge of HETI's earlier work for plaintiff—reviewed this plan, which the Water Board approved. The plan stated that the "ultimate goal for investigation and remediation of the Oak Knoll Work Center is restoration of the groundwater quality to background levels." 5/

5/ The background level for water refers to its quality before coming into contact with contaminants.

Based on the contaminants found in monitoring well 5, which was located west to southwest of the underground tank cavity, B&A concluded that the petroleum hydrocarbons were migrating in that direction and toward the DOM. The report concluded that a pump-and-treat system was the remediation method of choice. The system, according to Mr. Bonkowski, pulled vapor and groundwater out of monitoring wells 1, 5, 6, and 3-D. The water was pumped into a separator tank, where a sand filter separated any particulate from the water. The water then flowed into a carbon unit, where the carbon "polished" the water. Tr. at 307. The system discharged the water into the pasture at Oak Knoll, an area southwest of the tank cavity. The system also created a vacuum in the wells, forcing the vapor out of the ground and into a collection area on the surface, where it was "scrubbed" by carbon and discharged into the atmosphere. Id. at 311.

Mr. Bonkowski explained that the dual extraction nature of the pump-and-treat system prevented the groundwater from becoming contaminated by hydrocarbons caught in the underground soil. He said that the system began to operate in approximately September 1996; while it was in use, B&A collected influent and effluent samples to test the system's efficacy. Mr. Bonkowski posited that the system, while in operation, "did exactly what [it was meant] to do, which was to prevent contamination from entering the . . . domestic . . . well." Tr. at 330.

7. The DOM II and the diesel spill

During the period when B&A was drafting the control plan and constructing the pump-and-treat system, the Forest Service decided to abandon the DOM and drill a new domestic well (the "DOM II"). Mr. Rogers linked this decision to the contaminants discovered in monitoring well 5 in August and September 1995. The Forest Service retained B&A to oversee the installation of the DOM II. The well was installed east of the area impacted by the gasoline spill and monitoring well 5 and was operational by August or September 1996.

Several months before the DOM II became operational, on April 19, 1996, approximately 35 gallons of diesel fuel seeped into the Oak Knoll subsurface. When filling an auxiliary fuel tank from the Forest Service's above-ground diesel tank, located northeast of the tank cavity subjected to the gasoline spill, a temporary Forest Service employee forced a rock into the dispensing handle and walked away from the tank. When he returned, the diesel fuel had overflowed from the tank and spilled onto the ground. The employee notified his supervisor that day that he had spilled some diesel into the bed of his truck, but did not indicate that any diesel had escaped the truck's confines. (Were contamination not a serious matter, the court might observe that both plaintiff and the Forest Service were disserved by stunningly incompetent employees.)

Oak Knoll experienced heavy rains between April 19 and April 24, 1996, and Forest Service employees did not discover the spill until April 24. The Forest Service estimated that 35 gallons of diesel fuel had been spilled, based on a stained area of ground that measured 20 feet by 60 feet. Charged with remediating the diesel spill, B&A ordered an excavation of the stained area, whereby the soil was removed to a depth of one foot. The soil was tested for TPHD, among other pollutants, as was, on April 26, 1997, a "grab groundwater sample" from monitoring well 5. Only one soil sample tested positive for TPHD, which prompted B&A to excavate further the area surrounding the sample and submit this soil for additional tests. The parties have diametrically opposed positions regarding the impact of the diesel spill on the efforts to remediate Oak Knoll.

8. Termination of the pump-and-treat system

On April 17, 1998, the Water Board asked B&A to assess the efficacy of the remediation efforts at Oak Knoll. Mr. Bonkowski testified that from 1997 to 1999 the wells linked to the pump-and-treat system were showing low concentrations of contaminants, so B&A installed six new soil borings (adding to the eight borings drilled in December 1994) around the area of the gasoline spill. The test results on these borings appear in a Soil Boring Installation Report, dated May 12, 1999. In November 1996 the Water Board had begun requiring sites contaminated with gasoline to be tested for methyl tertiary butyl ether, known as MTBE. MTBE is an oxygenate added to gasoline to help it burn more cleanly. Groundwater testing performed subsequent to November 1996 detected MTBE, in varying concentrations, in monitoring wells 1, 3, 3-D, and 5, and in the DOM and DOM II.

The concentrations of MTBE found in the borings concerned Mr. Bonkowski, particularly a reading of 293 parts per billion of MTBE—a detection well in excess of MTBE's California MCL—found in an August 24, 1998 test of boring 13. This boring was located west of the area subjected to the gasoline spill, prompting Mr. Bonkowski to conclude that "MTBE was migrating from the tank cavity toward the west side of the site." Tr. at 335.

Employees from the Forest Service, the Water Board and B&A met in December 1999 to discuss turning off the pump-and-treat system. What occurred during this meeting is disputed. Mr. Bonkowski testified that Mr. Dunbar, Mr. O'Connor's supervisor from approximately 1993 to 1999, refused to read the soil boring report and stated that he wanted to turn off the pump-and-treat system. Mr. Dunbar played the sagacious role in this trial that Mr. O'Connor discharged in the last. Mr. Dunbar testified that petroleum constituents in the groundwater were not showing up in high enough concentrations to warrant continued operation of the system and could not recall if he had seen the results of the soil boring report. Mr. O'Connor had no recollection of the December 1999 meeting. Mr. Prat, who

succeeded Mr. O'Connor in 1999 as the liaison for the Oak Knoll remediation, remembered receiving the report, but concluded at that time that the results did not warrant further use of the pump-and-treat system.

Mr. Dunbar, on May 19, 1999, authored a letter indicating the Water Board's non-concurrence with continued operation of the pump-and-treat system. The Forest Service discontinued use of the system in late December 1999.

9. Renewed remediation activities

Although the pump-and-treat system did not see the new millennium, sampling from both the monitoring and the domestic wells continued into the aughts. 6/ The Water Board instructed the Forest Service, sometime in 2000, to begin pumping water through the DOM to test the efficacy of the remediation. Traces of MTBE appeared in monitoring wells 3 and 3-D and in the DOM and the DOM II at various points in 2002. 7/ Mr. Bonkowski, who, along with Mr. Rogers had disagreed with terminating the pump-and-treat system in 1999, believed that turning on the DOM forced MTBE into both domestic wells. Mr. Dunbar, however, convincingly defended his choice to terminate the pump-and-treat system, stating that, during a field inspection performed by the Water Board in September 1998, the Water Board employees "stuck our head[s] into the [separator] tank where all the wells were being pumped into" by the pump-and-treat system and detected "no odor of gasoline, or diesel, or any petroleum product." Tr. at 376. At that point Mr. Dunbar saw no useful purpose served by the system, because the "gasoline that was spilled was gone. We didn't know where it was." Id. Mr. O'Connor echoed this sentiment by stating that he doubted that the system was controlling the spread of the gasoline plume. See id. at 425. The court found Messrs. Dunbar and O'Connor more convincing on point.

6/ B&A began testing water from the DOM in February 1994 and from the DOM II in January 2001.

7/ In the report sent to the Water Board that reflected these readings, all of these detections were followed by two asterisks to indicate the following: "Estimated concentration above MDL and below MRL." The MDL, or method detection limit, is the minimum amount of contaminant that the testing equipment can detect. The MRL, or method reporting limit, is prescribed by the EPA as ten times higher than the MDL. The EPA does not require reporting a contaminant unless the amount exceeds the MRL, as "laboratories aren't comfortable quantifying the actual amount" of the contaminant if it appears in amounts less than the MRL. Tr. at 295. This framework was established to prevent the reporting of false positives.

After the appearance of MTBE, use of the DOM II was discontinued. B&A presented this new information to Mr. Prat, who had concurred with terminating the pump-and-treat system at the end of 1999. After reviewing the testing results, Mr. Prat agreed with B&A that the pump-and-treat system should be restarted because, even though it was possible that the operation of the system was "irrelevant" to controlling contaminants, the timing of the appearance of MTBE led him to conclude that "the logical thing to do is to start [the system] back and see if that would effectively do away with the contamination in" the DOM and the DOM II. Tr. at 463.

As of the date of trial, B&A had finished a hydraulic control workplan that called for the installation of two additional monitoring wells on the west side of the Oak Knoll site. B&A had received approval for this plan from the Water Board and was in the process of constructing the wells. If contaminants are found in these new wells, the plan calls for the pump-and-treat system to be connected to these wells and for water and vapor extraction to begin.

DISCUSSION

1. Defendant's evidence

Defendant's burden, which it requested to shoulder, was to "justify its expenditures with regard to the remediation." Cross, 54 Fed. Cl. at 330, ¶ 3. The Forest Service's cleanup activities are ongoing, so defendant is attempting to hold plaintiff to an open-ended liability. The court finds that defendant has failed to justify the extent of the costs that the Forest Service incurred during the remediation. While the court does not question the quality of the Oak Knoll cleanup or the Forest Service's use of the pump-and-treat system, the record cannot justify why the Forest Service's remediation plan proceeded sluggishly and continues into the twenty-first century.

When asked to characterize the nature of the Oak Knoll remediation, Mr. Bonkowski offered a recognizable framework by equating it to a "Volkswagen" or a "Chevrolet," as compared to a "Mercedes." Tr. at 349. The costs incurred during the Forest Service's decade-plus remediation effort, however, do not evidence the attention to cost and detail that his analogy implies. First, Mr. Bonkowski admitted that B&A did not consider cost when constructing workplans to be submitted to the Water Board. Cost became a factor only after agency approval, when B&A solicited subcontractors to complete the approved work. For example, Mr. Bonkowski did not take cost into consideration when preparing his August 3, 1993 remedial workplan. This workplan, ultimately adopted by the Water Board, contained the cornerstones of the Oak Knoll cleanup, including backfilling the tank cavity, testing soil and groundwater, and installing monitoring wells. Similarly, B&A recommended, in its

February 15, 1994 corrective action plan, the discontinuation of the DOM, the installation of a new domestic well at a substantial distance from the DOM, the need for a vapor extraction and pump test, and the operation of a pump-and-treat system to clean both water and vapor. By fall 1996 the Water Board had approved, and the Forest Service had implemented, all of these recommendations, which were submitted by B&A without regard to price.

Messrs. O'Connor and Dunbar, two Water Board employees, reinforced the fact that the Water Board approved the proposed remediation techniques without considering cost, as both individuals testified that B&A did not present cost information to them. Mr. Dunbar, in fact, testified that he "was not basing any judgment on money spent," as he "never saw a bill, an invoice, or anything." Tr. at 411. The state does not sit in the shoes of the Forest Service as the party responsible for justifying the reasonableness of costs incurred. Nonetheless, the absence of cost as a concern to any approving official is noted. 8/

The court does not impugn the integrity or recognized expertise of Mr. Bonkowski, a helpful, ingratiating witness, or the reputation or capability of his firm. Indeed, when testifying regarding the pump-and-treat system—the centerpiece of B&A's remediation plan—Mr. Bonkowski detailed several alternatives that B&A could have pursued to prevent contaminated water from infecting the domestic wells. For example, B&A could have installed a bentonite wall around the DOM, but it would have cost "millions of dollars" and would have been impossible to install because of the subsurface's fractured rock. Tr. at 302-03. Heating the soil with microwave technology, another remediation possibility, also would have been expensive because it required a huge energy source and extraction wells to pull the hydrocarbons out of the ground. Natural attenuation, *i.e.*, allowing the gasoline to biodegrade, was also considered and rejected, as Mr. Bonkowski knew of sites where petroleum products, untreated by remediation techniques, remained in heavy concentrations over 70 years after their release into the environment.

8/ Mr. O'Connor testified that officials of the Water Board met in September 1996 to discuss approving the water discharge permit necessary to operate the pump-and-treat system. Mr. O'Connor claimed that the executives were concerned about the cost and the duration of the system, but had their fears assuaged by Mr. O'Connor's assurances that Board employees overseeing the remediation expected the system to operate, beginning in September 1996, for a maximum of two and one-half years. According to Mr. Bonkowski and Mr. Rogers, B&A was in the process of reactivating the pump-and-treat system at the time of this trial.

Defendant also presented testimony showing that the choice of the pump-and-treat system was consistent with the industry standard. Mr. O'Connor characterized the remediation techniques used through the end of 1999 as "straightforward, and . . . done in a manner that would be consistent with many other sites with a large release." Tr. at 434. Scott D. Warner, a California-certified geologist and hydrogeologist, who was defendant's expert in hydrogeology and groundwater remediation, agreed with B&A's remediation plan, including backfilling the tank cavity, testing surrounding soil and water, and installing the pump-and-treat system. In his opinion, when dealing with a fractured subsurface such as the one at Oak Knoll, "the most proven way [in 1993] to get something out of the ground and to control it was with pump-and-treat," particularly when dealing with petroleum hydrocarbons. Id. at 889.

In sum while defendant proved that the Forest Service's remediation course was not unreasonable *per se*, defendant failed to show that the cleanup was pursued in a cost-conscious manner.

Defendant also failed to prove that the Forest Service was concerned with completing the remediation within a reasonable period of time, taking into consideration cost and efficiency. Mr. Warner testified that during the "emergency response" phase of the Oak Knoll remediation, the Forest Service should have "rectified [q]uickly" the cavity created when the contaminated tank was excavated from the site. Tr. at 895, 897. Although the spill occurred on April 30, 1993, the cavity was not backfilled until early November 1993, after the Forest Service had replaced plaintiff with B&A. This delay, according to Mr. Warner, "would have impacted the subsurface system," by allowing the gasoline to migrate further from the source of the spill. Id. at 909-10. Lester Feldman, defendant's other expert in soil and groundwater remediation, pointed out another delay in the remediation when he addressed the process culminating in the Water Board's issuance of the water discharge permit necessary to operate the pump-and-treat system. B&A had submitted its control plan, in which it recommended the pump-and-treat system, to the Water Board on December 22, 1995. The required permit did not issue until September 1996. While the court credits Mr. Feldman's assertion that the Water Board "was moving too slow" with respect to the permit, id. at 1008, neither the Forest Service nor B&A attempted to expedite the process.

Defendant made repeated efforts to justify continuing the remediation beyond the termination of the pump-and-treat system in 1999. The thrust of defendant's proof on this issue centered on the discovery of MTBE in the monitoring wells and the two domestic wells. The court finds this justification insubstantial. In 1996—three years after the gasoline spill and over two years after the initiation of the monitoring well testing—the state of California began to require testing for MTBE in sites impacted by a release of petroleum. Mr. Bonkowski testified that in 1996 "the industry was still in a state of flux as to really how

toxic [MTBE] was" and what consequences, if any, it would have if left untreated. Tr. at 319. Mr. Warner echoed this characterization, stating that, even in 2003, "technology for treating MTBE in the ground is still very much a research-type subject. There's not a silver bullet." Id. at 970. Mr. Prat, in fact, was unclear as to which, if any, filtration systems remove MTBE, further highlighting the limited scientific knowledge regarding the contaminant. Id. at 479.

Despite the nebulous nature of MTBE, defendant's witnesses consistently attempted to rely on the detection of MTBE to justify the duration of the remediation efforts. Mr. Bonkowski stated that detection of MTBE in late 1996 and early 1997 in monitoring well 5 shaped his opinion that the pump-and-treat system "was going to be operating longer" than he originally believed. Tr. at 320. Mr. Rogers characterized MTBE detections found in the DOM and the DOM II in 2002 9/ as spurring submission of the workplan that recommended the drilling of more monitoring wells and the recommencement of the pump-and-treat system. He seemed quite excited that the prolonged surveillance caught an unanticipated and previously unknown contaminant.

The concern over MTBE even impacted defendant's expert testimony. Mr. Warner admitted that MTBE's presence in the groundwater influenced his opinion that the Forest Service's costs, both for individual projects and in the aggregate, were reasonable through September 2001. Indeed, Mr. Warner consistently referred to the Oak Knoll site as an "MTBE site." E.g., Tr. at 920.

Defendant's reliance on MTBE belies the reality that the detection of benzene propelled the Oak Knoll remediation. Mr. Bonkowski testified that "the benzene concentration in [monitoring well] 5 in August and September '95 . . . drove remedial actions at the site." Tr. at 569. He hinged the choice of the pump-and-treat system on the 1995 benzene readings. Mr. Warner echoed this opinion, stating that the benzene detection, "rightfully so," was "the driver in this case." Id. at 920.

The benzene concentrations in monitoring well 5 disappeared in January 1998, almost two years before the discontinuation of the pump-and-treat system; yet the Forest Service, at the time of trial, was in the process of restarting the system based on detections of MTBE in monitoring wells 3 and 3-D, and in the DOM and the DOM II. When groundwater monitoring began at Oak Knoll in late 1993, the state of California did not require monitoring for MTBE. Defendant's argument, if taken to its logical conclusion, would allow the discovery of the presence of a newly regulated contaminant to justify continued remediation,

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9/ These detections were above the California state MDL, but below the state MRL.

even though that contaminant was not of concern when the remediation began, and even when any demonstrated need to continue remediation efforts for the original offending pollutant ceased to exist.

The Forest Service's attempt to justify continued remediation based on isolated readings of various contaminants also contravenes the stated goals of both the Forest Service and the Water Board. Mr. Rogers explained that an "[a]cceptable [contaminant] level to the Forest Service is not a system that's 100 percent clean," Tr. at 230, and admitted that there was no possibility that the Forest Service "will ever totally remediate this site or reduce a certain amount of risk to individuals that are drinking that water," id. at 231. Mr. O'Connor agreed with this assessment, conceding that, when faced with a discharge of 2000 gallons of gasoline, it was "impossible" to eliminate all petroleum contaminants from the site. Id. at 448. Mr. Dunbar acknowledged that, while it was desirable for responsible parties to return polluted water to its background state, even if that state exceeded regulatory standards for drinking water, this policy "in most cases [was] not practical." Id. at 388.

When questioned regarding a cut-off date for the Oak Knoll remediation, Mr. Rogers explained that "[w]hether [the groundwater samples show contaminant readings] below the limits or not, . . . you can dispute that point. There's nothing that says it's going to stay below it." Tr. at 235. Because there was no guarantee, in Mr. Rogers's opinion, that contaminants would not return to the DOM or the DOM II, it was advisable to continue monitoring indefinitely in order to "see what happens." Id. The Forest Service, under the assumption that it was not paying for the remediation efforts, did not adopt or follow a cost- or time-sensitive approach to the remediation. This attitude toward remediation is not reasonable.

2. Plaintiff's evidence

Plaintiff's burden, as explained by the court in its previous opinion, see Cross, 54 Fed. Cl. at 330, ¶ 3, was to show that the Forest Service's costs were unreasonable, *i.e.*, that it could have accomplished the cleanup more cost effectively. Plaintiff attempted to satisfy its burden to show unreasonable costs by focusing on any contaminant that was not traceable to the gasoline spill of April 1993.

Plaintiff pointed to the presence of TPHD in the groundwater and soil at Oak Knoll both before and after the diesel spill of April 1996. B&A's corrective action report, dated February 15, 1994, reported that TPHD was detected in soil collected from the north sidewall of the tank cavity and in monitoring wells 2, 3, and 3-D. Because no diesel had been spilled into the ground at that time, the report concluded that "the source of TPHD contamination in soil appears to be related to [the Forest Service's] work activities." Plaintiff also emphasized the large concentration of TPHD that was discovered, along with detections of

the other contaminants, in monitoring well 5 in 1995. Regarding the effects of the 1996 diesel fuel spill, plaintiff pressed the argument that concentrations of TPHD, found most recently in the DOM and the DOM II in July 2002, signified that B&A had not rid the Oak Knoll subsurface of diesel contaminants.

Defendant countered by showing that, after 1994, the TPHD detections cited by the B&A corrective action report virtually disappeared. Defendant also presented Dr. Richard A. Kagel, an expert in analytical chemistry and the laboratory director of K Prime, one of the laboratories charged with testing the soil and groundwater samples taken from Oak Knoll. Dr. Kagel testified that some of the testing results reported by K Prime in the years immediately after the gasoline spill had generated confusion in the Forest Service, prompting that organization to request clarification of K Prime's findings. Dr. Kagel sent a letter to Mr. Rogers of the Forest Service on July 12, 1995, which stated that, while both TPHG (an indicator of gasoline) and TPHD (a potential indicator of diesel) had been found in Oak Knoll's soil since the 1993 gasoline spill, the TPHD readings did not signify the presence of diesel. Because the contaminated soil was not tested immediately after the spill, the lighter gasoline hydrocarbons evaporated, leaving the heavier hydrocarbons in the ground. Heavier hydrocarbons, even when part of gasoline, can give off readings in the TPHD range. Thus, Dr. Kagel concluded in his letter to Mr. Rogers that "the contamination found in the soil samples from the April 30, 1993 spill is gasoline residue, undoubtedly a result of the gasoline spill."

Based on the fact that no diesel indicators were present in the ground below the excavated area, Mr. Bonkowski was of the view that the April 1996 diesel spill had no impact on the groundwater. A survey of the groundwater testing results reveals three isolated detections of TPHD after the diesel spill: in monitoring well 5 in October 2001, in the DOM in July 2002, and in the DOM II in July 2002. The TPHD detection in the DOM was below the California MCL.

The evidence suggests that non-gasoline contaminants may have been in the ground prior to the diesel spill. However, the testing results show that the diesel fuel that seeped into the ground in 1996 was remediated successfully. None of the post-1996 detections has been validated, 10/ and, for over five years after the spill occurred, TPHD was not detected in any of the monitoring or the domestic wells. Moreover, considering Dr. Kagel's credible testimony that TPHD may signify the presence of gasoline and not diesel, the court finds that

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10/ Validation is standard practice in the remediation industry; it refers to the process where further monitoring occurs to verify that an initial contaminant detection is not the result of a testing abnormality.

the presence of non-gasoline contaminants, if any were in the Oak Knoll subsurface, had a *de minimis* impact on the cost of remediation.

3. Remediation costs

Tasked with justifying the Forest Service's remediation costs was Lola A. Capp, who served as Contracting Officer for the Oak Knoll remediation from 1993 to 1996, and who, at the time of trial, was Chief Financial Officer for the Klamath Forest. She was as stalwart a witness as she was during the prior trial. Ms. Capp prepared a breakdown of the costs of the Oak Knoll remediation from May 1993 to December 2002. To prepare the summary, her staff and she consulted transaction registers, salary reports, purchase orders, contracts, and "miscellaneous purchases." Tr. at 702. Ms. Capp's report included costs for the following: 1) "gasoline spill cleanup;" 2) potable water delivery; 3) "Domestic Well & testing;" 4) installation, operation, and maintenance of the pump-and-treat system; 5) groundwater monitoring; 6) drilling and testing of soil borings; and 7) miscellaneous expenses. The total cost of remediation, per Ms. Capp's summary, was $1,265,401.50. 11/

11/ Defendant moved during trial to amend its counterclaim to reflect the total in Ms. Capp's summary. In her capacity as contracting officer, Ms. Capp had issued a Final Decision, dated April 8, 1996, assessing plaintiff $705,657.82 for the cost of the cleanup, and defendant based its counterclaim, filed July 18, 1997, on this amount. Defendant did not formally amend its counterclaim before trial. Plaintiff objected to the proposed amendment, arguing that allowing defendant to bypass the contracting officer's decision "short-circuits th[e] process entirely." Tr. at 1104. A contracting officer's decision, however, is not presumed correct when reviewed in the Court of Federal Claims, because the party seeking to justify the costs assessed in the contracting officer's decision "has the burden of proving the fundamental facts of liability and damages de novo." Wilner v. United States, 24 F.3d 1397, 1401 (Fed. Cir. 1994). The court is not beholden to the contracting officer's decision, as evidence presented at trial can trump any contrary rationale contained in the decision. See id. at 1402.

Plaintiff also contended that it had been prejudiced by the late amendment of defendant's counterclaim. Plaintiff was aware, at the time it filed its complaint, that "defendant had spent approximately $1,022,212.49 for remediation [as of December 31, 1996]; and the additional future costs estimated and claimed by defendant bring that total to $1,180,144.31." Compl. filed Apr. 4, 1997, ¶ 13. Plaintiff also received, in August 2002, the documentation supporting the figures in Ms. Capp's cost summary.

Plaintiff had only two witnesses at trial, each of whom offered alternative remediation methods to the one employed by B&A for the Forest Service: Michael J. Nimmons, an expert in wellhead treatment and groundwater treatment technologies, 12/ and Mr. Niebanck, an expert in environmental consulting, groundwater remediation, contamination assessment, and remediation cost analysis. Mr. Niebanck's familiarity with the Oak Knoll remediation traced back to September 1993, when he worked for HETI, an environmental consultant that plaintiff retained to replace B&A.

Mr. Niebanck's expert report faulted the Forest Service and B&A in four respects: 1) lack of diligence in finding a replacement source of drinking water for Oak Knoll; 2) significant delay in installing the pump-and-treat system; 3) inadequate characterization of the site prior to installation of the remediation system; and 4) poor design of the pump-and-treat system. He offered two alternative scenarios which, according to Mr. Niebanck, represented methods of remediation that were more time- and cost-conscious than the one employed by the Forest Service and B&A. The first alternative assumed that, prior to backfilling, the excavation area would have been enlarged, and, after the backfilling occurred in November 1993, monitoring wells 1 through 6 and 3-D would have detected no contaminants, because the enlarged excavation successfully would have removed them from the subsurface. The court finds this approach unimpressive. Other witnesses credibly testified to both the complex geography of the Oak Knoll subsurface and how that geography enabled the gasoline plume to move rapidly when released underground. Mr. Niebanck also admitted that this scenario assumed little or no impact to groundwater, but that any assumption about the spill's impact on subsurface water would be speculative, at best.

The second scenario would have accelerated the implementation of the major components of the Forest Service's remediation plan. After the installation of monitoring wells 1 through 6 and 3-D in February 1994, a pump and a vapor extracting test would have

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11/ (Cont'd from page 19.)

Because Ms. Capp's cost summary merely augments the amount assessed in her Final Decision and does not assert new or different grounds to support it, and because the court does not defer to either her rationale or statement of costs, any prejudice to plaintiff by allowing the counterclaim is inconsequential. The parties indicated during trial that they wished for the court to finally dispose of this matter, see Tr. at 1106, which has now been in litigation for over six years. Accordingly, the court grants defendant's motion to amend its counterclaim to $1,265,401.50.

12/ Plaintiff will not be surprised that the court found Mr. Nimmons's testimony to advocate an impractical, unrehearsed approach to remediation.

occurred immediately thereafter. The pump-and-treat system would have commenced operation in December 1994 and would have run until December 1995. After an additional year of monitoring, the remediation would have been completed by the end of 1996. Including costs for installing the DOM II and delivering potable water through April 1994, Mr. Niebanck estimated that this alternative would total $593,000.00, exclusive of any contribution already received from plaintiff. 13/

Defendant brought out numerous problems with Mr. Niebanck's accelerated remediation plan. Mr. Niebanck assumed that monitoring wells 1 through 4 and 3-D would have been installed; a control plan—based only on two or three episodes of groundwater monitoring—would have been written and approved by the Water Board; a discharge permit would have been granted by the Board; and the pump-and-treat system would have been built and begun functioning—all within one year. The equivalent phase of B&A's remediation plan—*i.e.*, from the drilling of the first monitoring wells to the commencement of the pump-and-treat system—took over two and one-half years. Even though the court finds that B&A and the Forest Service did not progress reasonably in their cleanup efforts, it cannot credit Mr. Niebanck's assumption that it would have taken one and one-half years less to implement the major components of his remediation plan than it took B&A to perform the equivalent aspects of its plan.

Mr. Niebanck's alternative scenario also assumed that the pump-and-treat system would have been discontinued after only one year, yet Mr. Niebanck admitted that he knew of no other water remediation system that had operated for less than one year. In short, Mr. Niebanck's second alternative made no allowance for unknown variables at Oak Knoll. 14/ The court finds that plaintiff presented one viable remediation alternative, but that plan assumed an accelerated schedule which likely could not be adhered to and failed to account for exigencies in the remediation process.

13/ When the $250,000.00 cost of the tank cavity excavation—which was paid almost entirely by plaintiff's insurer Federated, aside from a nominal contribution by plaintiff to satisfy its deductible—was added into this figure, this remediation scenario totaled approximately $843,000.00.

14/ Mr. Niebanck's projection also ignored the fact that, before the discovery of high concentrations of benzene and other contaminants in August 1995, the monitoring wells did not show contaminant levels that would warrant either a pump or a vapor extraction test or construction of a pump-and-treat system. Thus, Mr. Niebanck's model assumed construction of a remediation system during a period when the testing data did not support its implementation.

Taking an offensive approach, plaintiff also attacked the reasonableness of B&A's project costs, implying both that the Forest Service was a captive client and that B&A was feeding at the federal trough. The Forest Service contracted with B&A on a sole-source basis, justifying its decision to avoid opening the remediation to competition on FAR § 6.302-2. This regulation allows the Government to limit the number of bids or proposals for a certain project if there is an "unusual and compelling urgency." After B&A completed its initial scope of work, the Forest Service modified the contract as many as four times to cover additional remediation projects. Instead of requesting proposals from other environmental cleanup firms, the Forest Service utilized purchase orders to obtain additional services from B&A.

Ms. Capp explained that the Forest Service switched to purchase orders when the required remediation work fell outside the scope of B&A's original contract and that the use of purchase orders conformed with the simplified acquisition procedures ("SAP") contained in the pertinent regulations. As summarized by Ms. Capp, the regulations implementing SAP allow for a "more simplified and less formal" method of contracting. Tr. at 707; see also FAR § 13.002. FAR § 2.101 sets the threshold for invocation of SAP at $100,000.00, 15/ except in cases of contracts awarded outside the United States or those dealing with homeland security.

When using SAP, a contracting officer "must promote competition to the maximum extent practicable to obtain supplies and services from the source whose offer is the most advantageous to the Government." FAR § 13.104. To ensure maximum practicable competition, a contracting officer should "consider solicitation of at least three sources" that are located "within the local trade area." § 13.104(b). However, a contracting officer may solicit from a single source under SAP "if the contracting officer determines that the circumstances of the contract action deem only one source reasonably available (e.g., urgency, exclusive licensing agreements, or industrial mobilization)." FAR § 13.106-1(b)(1).

For each task covered by a purchase order, Ms. Capp requested a breakdown from B&A of the "dollar amount per hour that [it] was proposing, and then also the equipment dollar amount per hour that [it] was going to use" to verify the reasonableness of B&A's prices. Tr. at 708. She then compared B&A's price per task with those contained in regional contracts with three environmental firms. These contracts covered hazardous waste cleanups on government property. Ms. Capp checked to see if B&A's proposed price for a certain task

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15/ The SAP threshold was raised from $25,000.00 to $100,000.00 in 1995. See FAR § 13.101 (1994); FAR § 13.101 (1995).

fell within the range charged by the other three contractors for the same project. If so, she determined that B&A's price was "fair and reasonable." Id. at 710.

Plaintiff argued during trial that, after the expiration of B&A's contract, the Forest Service lacked justification to continue hiring B&A on a sole-source basis and pressured B&A to keep its prices under the SAP threshold. Plaintiff submitted several purchase orders to show that the Forest Service's reasons to avoid opening the remediation to competition were suspect. A May 17, 1995 purchase order—for additional testing required because of the discovery of contaminants—included an attached memorandum, authored by Ms. Capp on May 12, 1995, stating that it was in the "best interests of the Government to keep the same contractor working on the clean up of the gasoline spill for several reasons: Time is of the essence, [B&A] is aware of the existing problems and the site conditions that exist, and [plaintiff] is familiar with [B&A's] work."

Another purchase order, dated May 7, 1996, covered the "drill[ing] and develop[ing] [of] a new domestic supply well as specified within the cost estimate supplied by [B&A] dated April 22, 1996." 16/ Across the front of this order appears the handwritten note: "[P]lease process as sole source with attached justification as to need! Lola A. Capp." The attached justification for other than full and open competition was written by Mr. Rogers, with whom Ms. Capp spoke regarding the possibility of opening the remaining cleanup work to other firms. Mr. Rogers did not recommend open competition for the continuing remediation services "on the basis that award to any other firm would . . . result in the substantial duplication of costs." Further, replacing B&A would "result in an unacceptable delay in fulfilling [the Forest Service's] requirements to the . . . Water . . . Board." Finally, removing B&A as the sole-source contractor "would ensure that all professional site data generated by this firm would be then placed in an undefensible [sic] position during the current ongoing negotiations" between plaintiff, Federated, and the Forest Service regarding cost allocation for the remediation.

Mr. Rogers authored another justification for other than full and open competition on May 17, 1996, which echoed the argument that B&A should be retained on a sole-source basis because of the dispute between the parties over financing the remediation. In a January 21, 1998 justification for using K Prime, the subcontractor employed by B&A to test Oak Knoll's soil and water, Mr. Rogers contended that the use of another remediation firm "would most likely pose extremely adverse effects to the current case in litigation." Tr. at 217-18. This last statement more accurately reflected the Forest Service's overall sensitivity to litigation, as observed by the court, than its more neutral rationales.

16/ This purchase order appears to cover the construction of the DOM II.

Mr. Rogers did not dispute that these memoranda represented his reasons for employing B&A on a sole-source basis. Although he testified that retaining B&A resulted in a "cost savings" to the Forest Service because there would be no need "to go back through redundant issues and re-educate that [new] contractor, . . . [a]nother factor . . . was that we would stay with the one contractor because of the pending litigation." Tr. at 215.

The witness's written and oral justifications do not provide the necessary legal rationale for the court to approve of less than full and open competition for the remediation work performed after the end of B&A's contract with the Forest Service. However, Mr. Rogers, as he stated, worked for Ms. Capp; as contracting officer for the remediation, "she ultimately has the authority." Tr. at 214. The court was impressed by Ms. Capp's consistent testimony and has no doubt regarding her veracity.

The court rejects plaintiff's contention that Ms. Capp pressured B&A to keep its costs below the SAP threshold to enable the Forest Service to retain B&A through a series of purchase orders. Both Ms. Capp and Mr. Bonkowski testified convincingly that they did not attempt to alter prices submitted pursuant to a purchase order to avoid opening the remediation work to outside vendors. Ms. Capp denied that she broke down tasks totaling more than $100,000.00 so she could use SAP, see FAR § 13.003(c), or that she made payments to B&A below the SAP threshold in order to avoid opening the remediation to other firms. Mr. Bonkowski confirmed that Ms. Capp never asked him to keep prices under $100,000.00 for work obtained through a purchase order. See Tr. at 649-50.

A closer question exists regarding the Forest Service's justifications for employing B&A as a sole-source contractor. Ms. Capp denied that she justified retaining B&A based on the cost negotiations among plaintiff, Federated, and the Forest Service or based on the subsequent litigation in the Court of Federal Claims. The Forest Service initially invoked section 6.302-2 because, once the winter season began, the rain "could potentially move the plume . . . further downslope and contaminate possibly our well and private wells below the compound." Tr. at 715. When asked how the Forest Service defended retaining B&A after the end of its contract, Ms. Capp stated that B&A's "extensive investigation of the site" and the "complexities of drilling the well . . . combined with the continuing delivery of the potable water" warranted maintaining B&A on a sole-source basis. Id. at 743.

This testimony demonstrates a concern with confining the spread of the plume as quickly as possible, an acceptable legal justification for retaining B&A through a series of purchase orders. 17/ See FAR § 6.302-2(b)(1) (allowing sole-sourcing when an "unusual and compelling urgency precludes full and open competition"). However, although the court

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17/ Defendant's focus on the reasonableness of B&A's costs would not justify retaining the latter on a sole-source basis.

defers to Ms. Capp on this issue, the evidence substantiates that a crucial factor in the saga of the Oak Knoll remediation was plaintiff's inability, owing to its wrongful termination, to supervise the course of the cleanup.

Defendant, for its part, has failed to justify the reasonableness of the remediation costs because B&A did not consider costs when formulating its workplans, and because neither Forest Service nor B&A personnel could provide a plausible justification for continuing the remediation into the indefinite future. Defendant was able to show that, up until the termination of the pump-and-treat system, its remediation course was in line with industry norms. 18/

Showing that the remediation course was consistent with the industry standard, however, does not excuse the Forest Service's lack of concern for costs. Mr. Warner believed that the Forest Service's remediation costs from 1993 to September 2001—including running the pump-and-treat system, installing the monitoring wells, drilling the DOM II, and taking soil borings—"were reasonable." Tr. at 918. The court agrees that, after the termination of the pump-and-treat system at the end of 1999, a year of monitoring was required in order to verify the efficacy of the remediation. However, the court does not find that the cleanup reasonably should have extended beyond the end of 2000. Ms. Capp's cost summary assesses $131,919.53 in remediation costs to activities undertaken in 2001 and 2002. Removing this amount to reflect the Forest Service's costs through 2000 reduces Ms. Capp's estimate to $1,133,481.97. This deduction of two years of costs corresponds to the finding that the Forest Service did not justify B&A's retention beyond 2000 and is a reasonable and fair adjustment for the Forest Service's failure to pursue the remediation in a time-sensitive manner.

The cost of a reasonable remediation scenario thus falls between the range of approximately $850,000.00 (the amount proposed by Mr. Niebanck, including plaintiff's prior contribution for the tank cavity excavation) and approximately $1.1 million (the amount incurred by the Forest Service through the end of 2000). Given the unlawful termination of plaintiff, exacerbated by the Forest Service's unjustifiably long remediation effort, the court finds and concludes that the Forest Service is entitled to $725,000.00 for the cleanup of Oak Knoll, but has not justified assigning to plaintiff any future costs for work that it decides to undertake.

18/ For example, Mr. O'Connor testified that a two- to three-year duration for the pump-and-treat system was reasonable.

CONCLUSION

Accordingly, based on the foregoing, the Clerk of the Court shall enter judgment for defendant in the amount of $725,000.00 (so that the Government will have received a total of $975,000.00, when plaintiff's prior payment is taken into account). 19/

IT IS SO ORDERED.

No costs.

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Christine Odell Cook Miller
Judge

19/ When no statute or contractual provision governs the recovery of interest, award of interest is discretionary. See Royal Indem. Co. v. United States, 313 U.S. 289 (1941). The court declines to exercise its discretion to award defendant interest on its counterclaim, because defendant, through the wrongful termination of plaintiff, denied plaintiff the opportunity to supervise the remediation and conduct it in a cost-conscious manner that would satisfy the Forest Service. See General Elec. Co., Aerospace Group v. United States, 21 Cl. Ct. 72, 79 n.9, aff'd, 929 F.2d 679 (Fed. Cir. 1991) (declining to award defendant interest on counterclaim in action under Contract Disputes Act because "the delay in recovery is largely the fault of poor draftmanship by the Government").